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10/643,490

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Necdet Uzun

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EXAMINER

BATES, KEVIN T

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/643,490	<b>Applicant(s)</b> UZUN ET AL.	
	<b>Examiner</b> Kevin Bates	<b>Art Unit</b> 2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

***Response to Amendment***

This Office Action is in response to an Appeal Brief filed on August 4, 2008.

Claims 1-66 are pending in this application.

In view of the Appeal Brief filed on September 28, 2008, PROSECUTION IS  
HEREBY REOPENED. There is a new grounds of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the  
following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply  
under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed  
by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and  
appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth  
in 37 CFR 41.20 have been increased since they were previously paid, then appellant  
must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by  
signing below:

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2456

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 46-53 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

Claim 46 recites an apparatus comprising various means of performing process steps. Paragraph 69 of the specification discloses that the invention can be performed as software code. Since the listed steps can be performed through software, then the means for performing them contain at least one embodiment of software only. Software is not one of the four statutory class, thus the claim is directed towards non-patentable subject matter.

Claims 47-53 are non-statutory for the same reason as claim 46.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto (2003/0076781) in view of Blackard (5918020).**

**Regarding claims 1, 46, and 54,** Enomoto teaches a method comprising:  
receiving information indicating a need to change an amount of data being transmitted through a first media access control (MAC) device to a client of the first MAC device (§§237-238; 247-248);  
forming a message including an indication to a second MAC device to change a rate at which the second MAC device transmits data, wherein said forming the message uses the information indicating the need to change the amount of data being transmitted to the client (§§237-239); and  
transmitting the message to the second MAC device over a network (§§239).

Enomoto does not explicitly indicate that the client of the first MAC device determines the receiving rate is exceeding a set threshold when determining a need to change the amount of data being sent over the network.

Blackard teaches a system for providing feedback into the network to slow down transfer rates, where the receiving client is monitoring its buffer threshold and initiating the indication (See Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use allow the client to send a congestion notice back into the network to prevent buffer overflows occurring on the receiving client.

**Regarding claims 18 and 35,** Enomoto teaches an apparatus comprising:

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a first media access control (MAC) device operable to be coupled to a network, the first MAC device including control logic configured to prepare a message for transmission on the network including an indication to change a rate at which another MAC device transmits data (§§237-238; 247-248); and

a MAC client coupled to the first MAC device (Figure 1, elements C1-C4).

Enomoto does not explicitly indicate that the client of the first MAC device determines the receiving rate is exceeding a set threshold when determining a need to change the amount of data being sent over the network.

Blackard teaches a system for providing feedback into the network to slow down transfer rates, where the receiving client is monitoring its buffer threshold and initiating the indication (See Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use allow the client to send a congestion notice back into the network to prevent buffer overflows occurring on the receiving client.

**Regarding claims 4, 21, and 37**, Enomoto teaches the method of claims 1, 18 and 35 wherein the network includes a first datapath for transmitting data from the first MAC device to the second MAC device, and wherein the network includes a second datapath for transmitting data from the second MAC device to the first MAC device (Figure 1, where the ring network travels in both directions).

**Regarding claims 6, 26, 39, 49, and 57**, Enomoto teaches the method of claims 1, 18, 35, 46, and 54.

Enomoto does not explicitly indicate determining an extent to which a data buffer associated with the client of the first MAC device contains data; and preparing the information indicating the need to change the amount of data being transmitted through the first MAC device to the client of the first MAC device based on the extent to which the data buffer associated with the client of the first MAC device contains data.

Blackard teaches a system for providing feedback into the network to slow down transfer rates, where the receiving client is monitoring its buffer threshold and initiating the indication (See Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use allow the client to send a congestion notice back into the network to prevent buffer overflows occurring on the receiving client.

**Regarding claim 7 and 58**, Enomoto teaches the method of claims 6 and 54 further comprising: transmitting, to the first MAC device, the information indicating the need to change the amount of data being transmitted through the first MAC device to the client of the first MAC device (§§237-238; 247-248).

**Regarding claim 8, 27, 40, 50 and 59**, Enomoto teaches the method of claims 1, 18, 35, 46, and 54 wherein the message further includes a MAC device address (§§238).

**Regarding claim 9, 28 and 60**, Enomoto teaches the method of claims 8, 27, and 59 wherein the MAC device address corresponds to one of the first MAC device, the second MAC device, and another MAC device (§§238).

**Regarding claims 10, 29, 41, 51, and 61,** Enomoto teaches the method of claims 1, 18, 35, 46, and 54 wherein the indication to the second MAC device to change the rate at which the second MAC device transmits data includes at least one of: a MAC device address, a data transmission rate, a ramp factor, and a flag (§238).

**Regarding claims 11, 30, 42, and 62,** Enomoto teaches the method of claims 1, 18, 35, and 54 wherein the indication to the second MAC device to change the rate at which the second MAC device transmits data includes a data transmission rate, the method further comprising: determining the data transmission rate (§238).

**Regarding claim 12 and 63,** Enomoto teaches the method of claims 11 and 54 wherein the determining the data transmission rate further comprises at least one of: calculating the data transmission rate; selecting a value for the data transmission rate; and determining a ramp factor (§238).

**Regarding claims 13 and 64,** Enomoto teaches the method of claims 1 and 54 further comprising: transmitting the message from the second MAC device to a third MAC device (§214, where the congestion frame gets passed along the entire ring network).

**Regarding claims 15, 31, 43, 52 and 65,** Enomoto teaches the method of claims 1, 18, 35, 46, and 54 wherein the information indicating the need to change the amount of data being transmitted through the first MAC device to the client of the first MAC device includes at least one of: a data transmission rate, a counter value, a message indicating that a buffer threshold has been exceeded, and a signal from the client of the first MAC (§238).



**Regarding claim 16, 34, 45, 53, and 66,** Knightly teaches the method of claim 1 wherein: the information indicating the need to change the amount of data being transmitted through the first MAC device to the client of the first MAC device further comprises at least one of: information indicating the need to reduce the amount of data being transmitted, and information indicating the need to increase the amount of data being transmitted; and the indication to the second MAC device to change the rate at which the second MAC device transmits data further comprises at least one of: an indication to the second MAC device to reduce the rate at which the second MAC device transmits data, and an indication to the second MAC device to increase the rate at which the second MAC device transmits data (§§237-238; 247-248).

**Regarding claim 17,** Knightly teaches the method of claim 1 encoded in a computer readable medium as instructions executable on a processor, the computer readable medium being one of an electronic storage medium, a magnetic storage medium, and an optical storage medium (§134).

**Regarding claim 22,** Knightly teaches the apparatus of claim 21 wherein the first MAC device is further operable to transmit the message to the second MAC device (§§238-239).

**Regarding claim 23,** Knightly teaches the apparatus of claim 21 wherein the second MAC device is configured to transmit the message to a third MAC device (§§238-239; 214, where the congestion frame gets passed along the entire ring network).

**Regarding claim 32,** Knightly teaches the apparatus of claim 18 wherein MAC client further comprises packet processing circuitry coupled to the buffer (§134).

**Regarding claims 33 and 44**, Knightly teaches the apparatus of claims 32 and 35 wherein the packet processing circuitry includes the buffer control circuitry (¶134).

**Claims 2-3, 5, 14, 19-20, 24-25, 38, 47-48, and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto in view of Blackard, and in further view of Knightly (20030163593).**

**Regarding claims 2-3, 5, 14, 19-20, 24-25, 38, 47-48, and 55-56**, Enomoto teaches the method of claims 1, 18, 21, and 35.

Enomoto does not explicitly indicate wherein the network is a metropolitan area network (MAN), a resilient packet ring (RPR) network, or that the message is a resilient packet ring (RPR) fairness message.

Knightly provides a teaching of handling congestion in a ring network that is implemented in a a metropolitan area network (MAN) (Paragraph 5, lines 1-2), a resilient packet ring (RPR) network (Paragraph 7), and that the message is a resilient packet ring (RPR) fairness message (Paragraph 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Enomoto's congestion system could be implemented in the RPR system and use fairness messages to take advantage of the RPR standard protocol messages, while keeping the queues and flow classification of Enomoto.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-66 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571)272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Bates/  
Primary Examiner, Art Unit 2456